



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/748,440	12/27/2000	Wolfgang Daum	9D-HR-19572	4178

7590 03/22/2007
John S. Beulick
Armstrong Teasdale LLP
Suite 2600
One Metropolitan Square
St. Louis, MO 63102

EXAMINER

NEURAUTER, GEORGE C

ART UNIT	PAPER NUMBER
----------	--------------

2143

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/22/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/748,440

Applicant(s)

DAUM ET AL.

Examiner

George C. Neurauter, Jr.

Art Unit

2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-5 and 7-31 are currently presented and have been examined.

Response to Arguments

Applicant's arguments filed 2 February 2007 have been fully considered but they are not persuasive.

The Applicant argues that Koether does not teach or suggest a local area appliance network interconnecting a plurality of appliances. The Examiner is not persuaded by these remarks in view of the disclosures of Koether.

Koether expressly discloses:

"In FIG. 1, an arbitrary geographic area may be divided into a plurality of radio coverage areas or cells 105 (C.sub.1 - C.sub.6). It should be clearly understood that these cells may be located within the same...[building]. While the system in FIG. 1 is shown to include only six (6) cells, it should be clearly understood that the number of cells may be much larger. Associated with and located within each of cells 105 (C.sub.1 - C.sub.6) is one or more kitchen or restaurant appliances 110 (A.sub.1 -A.sub.11) under subscription to the services of the system. Each kitchen appliance 110 (A.sub.1 -A.sub.11) is preferably provided with a RF transmitter 120, RF receiver 130 and microprocessor based controller 140, as illustrated in FIG.

Art Unit: 2143

2. Alternatively, each kitchen appliance may effect communications through wire data links." (column 4, lines 15-30)

"Referring next to FIG. 5, there is shown therein a simplified schematic block diagram of the equipment for kitchen appliances 105 used to transmit and receive data from kitchen base stations 150 in accordance with the present invention. In particular, the equipment illustrated in FIG. 5, may be used for communication to kitchen base stations 150 over digital channels." (column 6, line 61-67)

In view of these disclosures, Koether clearly discloses a local area network that interconnects a plurality of appliances both wirelessly and/or via wired connections within a building.

Regarding the Applicant's arguments regarding the service interface or system, the Examiner maintains the views previously presented and submits the combined teachings of Koether and Andruzzi disclose these limitations.

Therefore, the rejections under Koether and Andruzzi are maintained and the claims as currently presented are not in condition for allowance.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2143

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1-5 and 7-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5 875 430 A to Koether in view of US Patent 4 580 276 to Andruzzi et al.

Regarding claim 1, Koether discloses a method of performing service diagnostics on appliances, the method comprising:

connecting a diagnostic interface (referred to throughout the reference as "base station") within a building housing an appliance to a local area appliance network (referred to throughout the reference as "cell"), wherein the diagnostic interface includes a display; (column 5, lines 3-19; column 7, lines 45-62, specifically lines 59-62)

Art Unit: 2143

accessing the appliance in the local area appliance network and performing a service diagnosis of the appliance through the diagnostic interface over the local area appliance network using service functions in the appliance; (column 5, line 60-column 6, line 9)

implementing the diagnostic interface within a single device including the display and a processing circuitry generating service commands to perform the service diagnosis; and servicing, by the diagnostic interface, the appliance, said servicing comprising at least one of adjusting a characteristic of the appliance and displaying to a technician the service diagnosis. (column 2, lines 23-36 and 54-59, specifically lines 34-36; column 5, line 60-column 6, line 9; column 7, lines 45-62, specifically lines 54-62)

Koether does not expressly disclose wherein the diagnostic interface includes a power line carrier modem within the diagnostic interface, Koether does disclose a communication means within the diagnostic interface that may be used in a RF, wired, microwave, satellite, or infrared network (column 5, lines 3-19, specifically lines 5-8 and 11-13)

Andruzzi discloses a power line carrier modem configured to modulate data to communicate the data over an alternating current (AC) power line. (column 2, line 44-column 3, line 17,

Art Unit: 2143

specifically column 2, lines 54-60 and column 2, line 65-column 3, line 17; column 4, line 59-column 5, line 19, specifically column 5, lines 2-12; column 5, line 55-column 6, line 17, specifically column 5, lines 55-67; column 9, line 33-59, specifically column 9, lines 56-59).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of these references since Andruzzi discloses that a power line carrier system using modems enables bi-directional data to be communicated within a building via a power line carrier to various devices including appliances within a local area network (column 2, lines 50-64). In view of these specific advantages and that both references are directed to providing communication systems for appliances, one of ordinary skill would have been motivated to combine these references and would have considered them to be analogous to one another based on their related fields of endeavor.

Regarding claim 2, Koether and Andruzzi disclose the method of claim 1.

Koether does not disclose wherein the local area appliance network comprises a power line carrier system, however, Koether does disclose that the local area appliance network may be

Art Unit: 2143

implemented via a RF, wired, microwave, satellite, or infrared network (column 5, lines 3-19)

Andruzzi discloses wherein the local area appliance network comprises a power line carrier system. (column 2, line 44-64).

Claim 2 is rejected since the motivations regarding the obviousness of claim 1 also apply to claim 1.

Regarding claim 3, Koether and Andruzzi disclose the method of claim 1.

Koether wherein accessing further comprises accessing a dedicated appliance controller in an appliance. (Figure 1, element 140; column 4, line 23-column 5, line 2)

Regarding claim 4, Koether and Andruzzi disclose the method of claim 1.

Koether discloses wherein the service functions comprise safety functions, parameter functions, and appliance status functions. (column 9, lines 3-60, specifically "Type of malfunction")

Regarding claim 5, Koether and Andruzzi disclose the method of claim 1.

Koether discloses wherein the method is further comprising implementing said diagnostic interface in a computer. (Figure 2, element 155; column 5, line 60-column 6, line 9; column 7, lines

Art Unit: 2143

54-62) (see also Figure 8, element 810; column 10, line 1, column 11, line 29)

Regarding claim 7, and Andruzzi disclose the method of claim 1.

Koether discloses wherein the method is further comprising connecting to a remote system to retrieve service diagnostic information. (column 5, line 60-column 6, line 9, specifically column 5, line 67-column 6, line 5)

Regarding claim 8, and Andruzzi disclose the method of claim 1.

Koether discloses wherein performing service diagnosis includes diagnosing and servicing the appliance based on the appliance diagnosis. (Figure 7, element 735; column 9, lines 44-60)

Regarding claim 9, Koether and Andruzzi disclose the method of claim 8.

Koether discloses wherein servicing the appliance comprises patching appliance firmware. (column 5, line 60-column 6, line 9, specifically column 6, line 2)

Regarding claim 10, Koether and Andruzzi disclose the method of claim 8.

Art Unit: 2143

Koether discloses wherein servicing the appliance comprises adjusting appliance parameters. (column 9, lines 44-60, specifically "modify the cooking profiles")

Regarding claim 11, Koether and Andruzzi disclose the method of claim 1.

Koether discloses the method is further comprising maintaining an external database (Figure 1, element 190) of appliance information based on diagnosis of the appliance. (column 5, lines 50-59; column 9, lines 3-60)

Regarding claim 12, Koether discloses a diagnostic interface ("base station"; Figure 1, element 150) for performing service diagnostics on appliances (column 5, line 60-column 6, line 9), the diagnostic interface comprising:

a display for viewing diagnostic and service information; (column 7, lines 45-62, specifically lines 59-62)

processing circuitry for generating service commands for an appliance; (column 7, lines 45-62, specifically lines 54-57)

said diagnostic interface implemented within a single device including said display and said processing circuitry generating the service commands to service the appliance, wherein said diagnostic interface configured to service the appliance by at least one of adjusting a characteristic of the appliance and displaying to a technician the appliance

Art Unit: 2143

diagnostic results. (column 2, lines 23-36 and 54-59, specifically lines 34-36; column 5, line 60-column 6, line 9; column 7, lines 45-62, specifically lines 54-62)

Koether does not expressly disclose a power line carrier communication interface configured to be connected to a local area appliance network within a building housing the appliance, wherein said power line carrier communication interface facilitates transmitting the service commands to the appliance and receiving appliance diagnostic results on a power line carrier communication system, and said diagnostic interface implemented within a single device including a power line communication interface, however, Koether does disclose a wired communication interface within the diagnostic interface to accomplish these limitations (column 5, lines 3-19, specifically lines 5-8 and 11-13). Koether also discloses that RF, microwave, satellite, or infrared communication interfaces may also be used. (column 5, lines 13-19)

Andruzzi discloses a power line carrier interface configured to modulate data to communicate the data over an alternating current (AC) power line. (column 2, line 44-column 3, line 17, specifically column 2, lines 54-60 and column 2, line 65-column 3, line 17; column 4, line 59-column 5, line 19, specifically column 5, lines 2-12; column 5, line 55-column 6,

Art Unit: 2143

line 17, specifically column 5, lines 55-67; column 9, line 33-59, specifically column 9, lines 56-59).

Claim 12 is rejected since the motivations regarding the obviousness of claim 1 also apply to claim 12.

Regarding claim 13, Koether and Andruzzi disclose the diagnostic interface of claim 12.

Koether discloses wherein the diagnostic interface is further comprising an appliance bus interface ("wireless means") for communicating with the appliance. (column 5, lines 3-19)

Regarding claim 14, Koether and Andruzzi disclose the diagnostic interface of claim 12.

Koether discloses wherein the diagnostic interface is further comprising a remote service center interface. (Figure 1, element 175; column 5, lines 37-49)

Regarding claim 15, Koether and Andruzzi disclose the diagnostic interface of claim 14.

Koether discloses wherein the diagnostic interface gathers appliance statistics to send to a remote service center over the remote service center interface. (column 5, line 60-column 6, line 9)

Regarding claim 16, Koether and Andruzzi disclose the diagnostic interface of claim 12.

Art Unit: 2143

Koether discloses wherein the diagnostic interface is further comprising a user interface to facilitate service diagnostics. (column 7, lines 45-62, specifically lines 59-62)

Regarding claim 17, Koether and Andruzzi disclose the diagnostic interface of claim 12.

Koether discloses wherein the appliance comprises a refrigerator. (column 4, lines 23-36, specifically lines 32-36)

Regarding claim 18, Koether and Andruzzi disclose the diagnostic interface of claim 12.

Koether discloses wherein the appliance comprises an oven. (column 4, lines 23-36, specifically lines 32-36)

Regarding claim 19, Koether and Andruzzi disclose the diagnostic interface of claim 12.

Koether discloses wherein the appliance comprises a heating system. (column 4, lines 23-36, specifically lines 32-36)

Regarding claim 20, Koether and Andruzzi disclose the diagnostic interface of claim 12.

Koether discloses wherein the appliance comprises a cooling system. (column 4, lines 23-36, specifically lines 32-36)

Regarding claim 21, Koether and Andruzzi disclose the diagnostic interface of claim 12.

Art Unit: 2143

Koether discloses wherein the appliance comprises a lighting system. (column 4, lines 23-36, specifically lines 32-36)

Regarding claim 22, Koether discloses a diagnostic system for provide access to service diagnostics on an appliance, the system comprising:

a local area appliance network ("cell") coupled to the appliance; (column 5, lines 3-36)

a diagnostic interface configured to be connected to said local area appliance network within a building housing the appliance, said diagnostic interface comprising a display, wherein said diagnostic interface facilitates accepting service destined for the appliance, the diagnostics interface implemented within a single device including a display device and a microprocessor configured to generate the diagnostics commands; ("base station"; Figure 1, element 150; column 5, lines 3-19; column 5, line 60-column 6, line 9; column 7, lines 45-62, specifically lines 54-62; column 7, lines 45-62, specifically lines 59-62) and a dedicated appliance controller for receiving and executing the diagnostics commands (Figure 1, element 140; column 4, line 23-column 5, line 2), wherein said diagnostic interface configured to service the appliance by at least one of adjusting a characteristic of the appliance and

Art Unit: 2143

displaying to a technician the diagnostics commands (column 2, lines 23-36 and 54-59, specifically lines 34-36; column 5, line 60-column 6, line 9; column 7, lines 45-62, specifically lines 54-62).

Koether does not disclose wherein the diagnostics interface includes a power line carrier modem within the diagnostic interface, Koether does disclose a communication means within the diagnostic interface that may be used in a RF, wired, microwave, satellite, or infrared network (column 5, lines 3-19, specifically lines 5-8 and 11-13)

Andruzzi discloses a power line carrier modem configured to modulate data to communicate the data over an alternating current (AC) power line. (column 2, line 44-column 3, line 17, specifically column 2, lines 54-60 and column 2, line 65-column 3, line 17; column 4, line 59-column 5, line 19, specifically column 5, lines 2-12; column 5, line 55-column 6, line 17, specifically column 5, lines 55-67; column 9, line 33-59, specifically column 9, lines 56-59).

Claim 22 is rejected since the motivations regarding the obviousness of claim 1 also apply to claim 22.

Claim 23 is rejected since claim 23 recites a system that contains substantially the same limitations as claim 2.

Art Unit: 2143

Regarding claim 24, Koether and Andruzzi disclose the system of claim 22.

Koether discloses wherein the diagnostics interface comprises a computer. (Figure 2, element 155; column 7, lines 45-62, specifically lines 59-62)

Regarding claim 25, Koether and Andruzzi disclose the system of claim 22.

Koether discloses wherein the diagnostics interface comprises a PC card interface and an appliance bus interface. (column 10, lines 1-22)

Regarding claim 26, Koether and Andruzzi disclose the system of claim 22.

Koether discloses wherein the system is further comprising a communications interface between the local area appliance network and the dedicated appliance controller. (column 5, lines 3-36)

Regarding claim 27, Koether and Andruzzi disclose the system of claim 22.

Koether discloses wherein the system is further comprising a remote system, the remote system connectable to the diagnostic interface via an Internet connection. (column 5, lines 37-49)

Regarding claim 28, Koether and Andruzzi disclose the system of claim 22.

Art Unit: 2143

Koether discloses wherein the dedicated appliance controller is contained within the appliance. (Figure 1, element 140; column 4, line 23-column 5, line 2)

Regarding claim 29, Koether discloses the system of claim 22.

Koether does not expressly disclose wherein the diagnostic interface comprises a power line carrier modem which allows the diagnostic interface to communicate with an appliance via a power line carrier system, however, Koether does disclose that the local area appliance network may be implemented via a RF, wired, microwave, satellite, or infrared network (column 5, lines 3-19)

Andruzzi discloses wherein the local area appliance network comprises a power line carrier system configured to modulate data to communicate the data over an alternating current (AC) power line. (column 2, line 44-column 3, line 17, specifically column 2, lines 54-60 and column 2, line 65-column 3, line 17; column 4, line 59-column 5, line 19, specifically column 5, lines 2-12; column 5, line 55-column 6, line 17, specifically column 5, lines 55-67; column 9, line 33-59, specifically column 9, lines 56-59).

Claim 29 is rejected since the motivations regarding the obviousness of claim 1 also apply to claim 29.

Art Unit: 2143

Regarding claim 30, Koether and Andruzzi disclose the method of claim 1.

Koether discloses wherein adjusting the characteristic comprises changing, by the diagnostic interface, the characteristic of a home appliance. (column 2, lines 23-36, specifically lines 34-36; column 5, line 60-column 6, line 9; column 7, lines 45-62, specifically lines 54-62)

Koether does not expressly disclose wherein the diagnostic interface includes a power line carrier modem within the diagnostic interface, Koether does disclose a communication means within the diagnostic interface that may be used in a RF, wired, microwave, satellite, or infrared network (column 5, lines 3-19, specifically lines 5-8 and 11-13)

Andruzzi discloses a power line carrier modem configured to modulate data to communicate the data over an alternating current (AC) power line. (column 2, line 44-column 3, line 17, specifically column 2, lines 54-60 and column 2, line 65-column 3, line 17; column 4, line 59-column 5, line 19, specifically column 5, lines 2-12; column 5, line 55-column 6, line 17, specifically column 5, lines 55-67; column 9, line 33-59, specifically column 9, lines 56-59).

Claim 30 is rejected since the motivations regarding the obviousness of claim 1 also apply to claim 30.

Regarding claim 31, Koether and Andruzzi disclose the method of claim 1.

Koether does not expressly disclose translating, by the power line carrier modem, between an appliance protocol of the appliance and a power line carrier protocol, however, Koether does disclose wherein the diagnostic interface communicates with appliances bidirectionally through the use of transceiver modem means and that the diagnostic interface is able to interpret data sent from the appliance (column 5, lines 3-35 and 60-65).

Andruzzi discloses the power line carrier modem as shown above regarding claim 1.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to translate, by the power line carrier modem, between an appliance protocol of the appliance and a power line carrier protocol since Koether expressly discloses that the transceiver modem is able to receive data sent from an appliance and interpret this data on the diagnostic interface. Therefore, one of ordinary skill in the art would recognize that translation of protocols between the data that is sent from the appliance to the diagnostic interface and the transceiver modem means would occur if the diagnostic interface can read data from the transceiver modem and therefore would have found it obvious that translation

Art Unit: 2143

between protocols occurs in view of the disclosures of Koether. It further would have been obvious to use a power line carrier modem in place of the transceiver modem means disclosed in Koether since, as shown above regarding claim 1, Koether suggests that means within the diagnostic interface that may be used in a RF, wired, microwave, satellite, or infrared network and Andruzzi discloses that a power line carrier system using modems enables bi-directional data to be communicated within a building via a power line carrier to various devices including appliances within a local area network. In view these disclosures within Koether and Andruzzi and that both references are directed to providing communication systems for appliances, one of ordinary skill would have been motivated to combine these references in order to achieve the claimed invention and would have considered them to be analogous to one another based on their related fields of endeavor.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action

Art Unit: 2143

is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

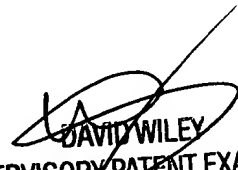
Any inquiry concerning this communication or earlier communications from the examiner should be directed to George C. Neurauter, Jr. whose telephone number is 571-272-3918. The examiner can normally be reached on Monday-Friday 9am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley, can be reached on 571-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2143

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

gcn


DAVID WILEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100